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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,448	07/19/2002	Hiroki Sato	2002-0348A	9408

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EXAMINER

FORD, VANESSA L

ART UNIT PAPER NUMBER

1645

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/089,448

Applicant(s)

SATO ET AL.

Examiner

Vanessa L. Ford

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### DETAILED ACTION

1. This Office Action is responsive to Applicant's amendment and response filed July 21, 2005. Claim 4 has been amended. Claims 1-3 and 5-12 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

2. The text of those sections of the Title 35, U.S. code not included in this action can be found in the prior Office Action.

### ***Rejection Maintained***

3. The rejection under 35 U.S.C. 102(b) is maintained for claim 4 for the reasons set forth on pages 4-5, paragraph 5 of the previous Office Action.

The rejection was on the grounds that Yang et al teach spawned insects (e.g. stinkbugs) that are hosts for the entomopathogenic fungus, *Cordyceps nutans* (page 20). Yang et al teach that fruit bodies were collected from these insects (page 20). Yang et al teach insects in which hyphae were removed (e.g. spawned insects) (page 5). Therefore, the hyphae were present in the insect in order to be removed from the insect. Yang et al teach that two species of insect *Vespa xanthoptera* and *Vespula lewisii* are species of insects in which fruiting bodies of an entomopathogenic fungus can be collected (page 12). Claim limitations "injected by" and "for the production of fruit bodies of an entomopathogenic fungus" are being viewed as a limitation of intended use. It should be noted that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). Yang et al anticipate the claimed invention.

Since the Office does not have the facilities for examining and comparing applicant's spawned insect with the spawned insect of the prior art, the burden is on the applicant to show a novel or unobvious difference between the claimed product and the

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product of the prior art (i.e., that the spawned insect of the prior art does not possess the same material structural and functional characteristics of the claimed spawned insect). See In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977) and In re Fitzgerald et al., 205 USPQ 594.

Applicant urges that a characteristic feature of the invention is that the insects are inoculated by hyphal bodies by injection. Applicant urges that Yang et al refer to an inoculation procedure using <sup>conidia</sup> ~~conidia~~ rather than hyphal bodies. Applicant urges that Yang et al uses a method of sprinkling or coating the insect with the <sup>conidia</sup> ~~conidia~~ rather than injection. Applicant <sup>urges</sup> the Examiner based her rejection on a description in Yang et al that hyphae were removed from the insect and the infected insects of Yang are equivalent to the insects of the claimed invention. Applicant urges that Yang et al merely teaches a procedure for separating hyphae from field collected entomopathogenic fungus samples. Applicant urges that Yang et al do not teach artificially infected but rather teach naturally infected insects.

Applicant's arguments filed July 21, 2005 have been fully considered but they are not persuasive. Yang et al teach insects that have been inoculated with hyphal bodies. Applicant admits in this response that Yang et al teach "insects that have been naturally infected with hyphae with their statement that Yang et al teach separating hyphae from field collected entomopathogenic fungus samples (page 3, 2<sup>nd</sup> paragraph of Applicant's response). Therefore, the insects of the prior art are the same<sup>95</sup> ~~the~~ insects of the claimed invention. Applicant has provided no side-by-side comparison to show that the spawned insects of the prior art differ from the claimed spawned insects.

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It should be noted that the claims are directed to a product and not a method of producing spawned insects. Thus, Applicant is arguing "process limitations in a product claim" with their assertion that "Yang et al used a method of sprinkling or coating the insect with the hyphae instead of injecting the insect with the hyphae. Yang et al anticipate the claimed invention. Therefore, the rejection is maintained.

***New Ground of Rejection***

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 4 is rejected under 35 U.S.C. 101 because the claim is directed to a spawned insect. This claim reads on a "product of nature" because spawned insects can be inoculated naturally. This is evidenced by Mizuno (*International Journal of Medicinal Mushrooms*, Vol. 1, pp. 251-261, 1999).

***Status of Claims***

5. No claims allowed.

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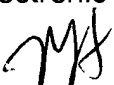
**Conclusion**

6. Any inquiry of the general nature or relating to the status of this general application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Papers relating to this application may be submitted to Technology Center 1600, Group 1640 by facsimile transmission. The faxing of such papers must conform with the notice published in the Office Gazette, 1096 OG 30 (November 15, 1989). Should applicant wish to FAX a response, the current FAX number for the Group 1600 is (703) 872-9306.

Any inquiry concerning this communication from the examiner should be directed to Vanessa L. Ford, whose telephone number is (571) 272-0857. The examiner can normally be reached on Monday – Friday from 9:00 AM to 6:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith, can be reached at (571) 272-0864.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Vanessa L. Ford  
Biotechnology Patent Examiner  
September 21, 2005

  
**LYNETTE R. F. SMITH**  
**SUPERVISORY PATENT EXAMINER**  
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